AMENDMENT

In the Specification:

Please replace the paragraph, beginning on page 27, line 5, with the following rewritten paragraph:

--The kinase domain of human JAK1 was amplified from U937mRNA using the polymerase chain reaction with the following primers:

XHOI-J1 5'-CCG CTC GAG ACT GAA GTG GAC CCC ACA CAT-3'

(SEQ ID NO:1)

J1-KPNI 5'-CGG GGT ACC TTA TTT TAA AAG TGC TTC AAA-3'

(SEQ ID NO:2)--

Please replace the paragraph, beginning on page 27, line 14, with the following rewritten paragraph:

--The kinase domain of human JAK2 was amplified from U937mRNA using the polymerase chain reaction with the following primers:

SALI-jk2 5'-ACG CGT CGA CGG TGC CTT TGA AGA CCG GGA T-3'

(SEQ ID NO:3)

jk2-NOTI 5'-ATA GTT TAG CGG CCG CTC AGA ATG AAG GTC ATT T-3'

(SEQ ID NO:4)--

Please replace the paragraph, beginning on page 27, line 23, and bridging to page 28, with the following rewritten paragraph:

--The kinase domain of human JAK3 was amplified from U937mRNA using the polymerase chain reaction with the following primers:

XHOI-J3 5'-CCG CTC GAG TAT GCC TGC CAA GAC CCC ACG-3'

(SEQ ID NO:5)

J3-KPNI 5'-CGG GGT ACC CTA TGA AAA GGA CAG GGA GTG-3'

(SEQ ID NO:6)--

Please replace the paragraph, beginning on page 28, line 8, with the following rewritten paragraph:

--The kinase domain of human TYK2 was amplified from A549 mRNA using the polymerase chain reaction with the following primers:

HT2EK 5'-GGA GCA CTC GAG ATG GTA GCA CAC AAC CAG GTG-3'

(SEQ ID NO:7)

ITY2.2R 5'-GGA GCA GGA ATT CCG GCG CTG CCG GTC AAA TCT GG-3'

(SEQ ID NO:8)--

Please replace the paragraph, beginning on page 28, line 21, and bridging to page 29, with the following rewritten paragraph:

--Kinase assays were performed in a 96 well capture-based ELISA assay or in 384 well Optiplates (Packard) using an Alphascreen Protein Tyrosine Kinase kit. In either ~~easse~~ case using approximately 1.5 μg of affinity purified PTK domain in the presence of 50mM HEPES, pH 7.5, 10mM $MgCl_2$, 150mM NaCl and 10μM-1mM ATP. The biotinylated substrate biotin-EGPWLEEEEEAYGWMDF-NH_2 (SEQ ID NO:9) (final concentration 5μM) was used as substrate. In the ELISA assay tyrosine phosphorylation was quantitated following transfer to an avidin coated ELISA plate using peroxidase-linked anti-phospho-tyrosine antibody PY20. In the Alphascreen assay, Alphascreen phosphotyrosine acceptor beads followed by streptavidin donor beads were added under subdued light. The ELISA plates were read on a BMG Fluorostar, the Alphascreen plates were read on a Packard Fusion

Alpha. Inhibitors were added to the assays fifteen minutes prior to the addition of ATP. Inhibitors were added in aqueous DMSA, with DMSA concentrations never exceeding 1%.--